



Electricity spot prices above \$5000/MWh

**Victoria and South Australia,
7 February 2018**

11 April 2018

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Contents

1	Introduction.....	4
2	Summary	5
3	Analysis.....	6
	3.1. Overview of actual and expected conditions	6
	3.2. Supply and Demand	7
	3.2.1 Supply	8
	3.2.2 Demand	10
	Appendix A: Lack of Reserve	11
	Appendix B: Significant Rebids	13
	Appendix C: Price setter	16
	Appendix D: Closing bids	18
	Appendix E: Relevant Market Notices	22

1 Introduction

The Australian Energy Regulator regulates energy markets and networks under national legislation and rules in eastern and southern Australia, as well as networks in the Northern Territory. Its functions include:

- monitoring wholesale electricity and gas markets to ensure energy businesses comply with the legislation and rules, and taking enforcement action where necessary;
- setting the amount of revenue that network businesses can recover from customers for using networks (electricity poles and wires and gas pipelines) that transport energy;
- regulating retail energy markets in Queensland, New South Wales, South Australia, Tasmania (electricity only), and the ACT;
- operating the Energy Made Easy website, which provides a retail price comparator and other information for energy consumers;
- publishing information on energy markets, including the annual State of the energy market report, to assist participants and the wider community.

The AER is required to publish a report whenever the electricity spot price exceeds \$5000/MWh in accordance with clause 3.13.7 (d) the National Electricity Rules.

The report:

- describes the significant factors contributing to the spot price exceeding \$5000/MWh, including withdrawal of generation capacity and network availability;
- assesses whether rebidding contributed to the spot price exceeding \$5000/MWh;
- identifies the marginal scheduled generating units; and
- identifies all units with offers for the trading interval equal to or greater than \$5000/MWh and compares these dispatch offers to relevant dispatch offers in previous trading intervals.

These reports are designed to examine market events and circumstances that contributed to wholesale market price outcomes and are not an indicator of potential enforcement action.

2 Summary

On 7 February 2018, the spot price for electricity for the 4 pm trading interval reached \$6847/MWh and \$8001/MWh in Victoria and in South Australia, respectively. The previous day, the market operator forecast prices above \$5000/MWh on this day.

Temperatures were high in both regions, exceeding 37°C in Melbourne and 40°C in Adelaide leading to higher than average demand. Following the closure of the Hazelwood and Northern power stations, there has been a material reduction in available capacity. There is still enough generation capacity available to meet demand, changes in supply conditions has led to a shift up the supply curve.

The Basslink interconnector was providing electricity to Victoria from Tasmania at its full capability. As forecast, normal network constraints limited the flow of electricity from New South Wales into Victoria. To meet customer demand in the two regions, electricity from high-priced local sources was required, resulting in high prices.

Participants rebidding capacity from low to high prices did not contribute to the high prices.

3 Analysis

The Australian Energy Market Operator (AEMO) makes regular assessments of expected demand for electricity in each region, based on inputs including forecast temperature, season and the day of the week. AEMO issues “targets” to generators to generate electricity to meet this demand, taking into account network capability and generator offers. Generator offers comprise the mega-watt (MW) capacities generators are willing to supply at a range of prices and the total amount the generator can produce (generator availability).

To inform market participants about market conditions, AEMO publishes price, network capability and demand forecasts in five minute and 30 minute timeframes. These forecasts form the basis for AEMO’s assessments of interconnector capacity, transfers between regions, reserves and conditions that relate to power system security. For the 4 pm trading interval, the spot price for electricity reached \$6847/MWh and \$8001/MWh in Victoria and South Australia respectively. The following sections examine why the high spot prices occurred.

3.1 Overview of actual and expected conditions

Spot prices in Victoria and South Australia exceeded \$5000/MWh for the 4 pm trading interval. Table 1 and Table 2 show actual and forecast spot price, demand and availability for the 3.30 to 5 pm trading intervals in Victoria and South Australia, respectively. We have included the 3.30, 4.30 and 5 pm trading intervals in our analysis as the spot prices exceed our weekly reporting threshold¹ and we have chosen to explain these prices as part of this report.

Table 1 shows for the 4 pm trading interval for Victoria:

- The spot price for electricity was forecast to exceed \$9000/MWh 12 and four hours ahead. The actual price was lower than forecast because participants shifted capacity from high to low prices increasing the levels of low priced capacity without increasing the total available capacity.
- Availability was close to forecast, but demand for electricity was around 290 MW higher than forecast.

¹ We report on spot prices greater than three times the weekly average and above \$250/MWh.

Table 1: Actual and forecast spot price, demand and available capacity for Victoria

Trading interval	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 PM	1921	506	10 000	8793	8539	8550	9087	9047	9072
4.00 PM	6847	9532	11 053	8987	8699	8693	9096	9068	9107
4.30 PM	3810	11 501	12 224	9045	8870	8856	9116	9068	9102
5.00 PM	3737	13 050	13 050	8905	9077	9068	9132	9023	9107

Table 2 shows for the 4 pm trading interval for South Australia:

- The spot price for electricity was forecast to exceed \$10 000/MWh 12 and four hours prior. The actual spot price for electricity was lower than expected because participants shifted capacity from high to low prices.
- Demand was around 150 MW higher than forecast four hours prior, while availability was around 65 MW lower than forecast.

Table 2: Actual and forecast spot price, demand and available capacity for South Australia

Trading interval	Price (\$/MWh)			Demand (MW)			Availability (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 PM	2185	579	10 865	2434	2304	2315	2829	2924	2949
4.00 PM	8001	10 579	12 266	2545	2394	2393	2848	2914	2920
4.30 PM	4531	12 451	13 100	2634	2464	2456	2834	2899	2881
5.00 PM	4589	14 170	13 999	2686	2700	2535	2811	2880	2848

3.2 Supply and Demand

Generators determine the amount of electricity or capacity (MW) they offer and the price they are prepared to receive (\$/MWh) in ten price and quantity (MW) pairs. AEMO aggregates these offers from lowest to highest price to produce a dispatch stack. Every five minutes AEMO then “dispatches” sufficient capacity from each generator, on the basis of that dispatch stack and accounting for transmission capability, to meet the regional electricity demand at the lowest possible price.

The price of the highest offer needed to meet demand sets the 5-minute dispatch price. The spot price paid to generators is the average of the six dispatch prices that make up

the 30 minute trading interval; all dispatched generators are paid at this price for the amount of electricity that they produced, regardless of how they bid.

The following sections analyse supply and demand conditions relevant to the high prices.

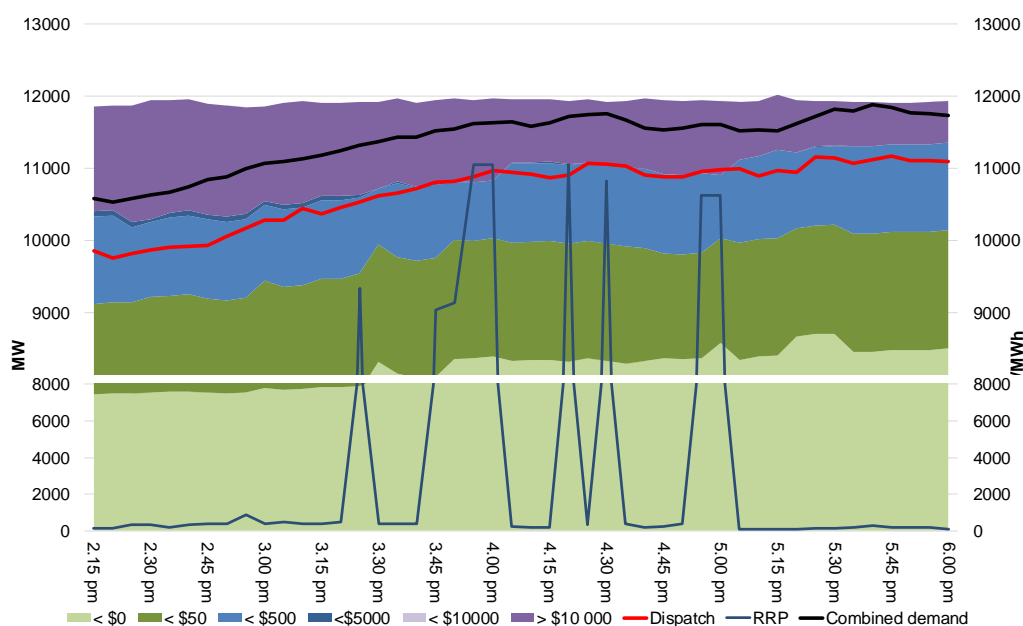
3.2.1 Supply

This section examines the supply side factors that contributed to the high price outcomes. Victoria and South Australia are electrically connected via two interconnectors: the 600 MW Heywood (Vic-SA) interconnector and the 220 MW² Murraylink interconnector. If one of the interconnectors allows electricity to flow freely between the regions, then the two regions are considered to be price-aligned, or, in other words, acting as a combined region. As the Heywood interconnector was unconstrained for the duration of the high prices, for analysis purposes we treat Victoria and South Australia as one region.

3.2.1.1 Generator offers

Figure 1 shows the combined cumulative generator offers for Victoria and South Australia. Also known as closing bids, the figure shows the actual capacity offered by generators in both regions, including amendments to their offers throughout the day to match changes to their own economic and/or physical positions (known as “rebidding”). The figure also shows actual combined local generation dispatch (red line) and actual combined demand (black line). As the two regions were essentially acting as a combined region, we have chosen to include one price only. To this end, the blue line represents the 5-minute dispatch price in Victoria.

Figure 1: Combined closing bids and dispatch in Victoria and South Australia, and dispatch price in Victoria



² These are the maximum (“nominal”) flows from Victoria to South Australia.

Participants offered around 84 per cent of capacity priced below \$5000/MWh through initial offers (made the day prior). Despite the high volume of low-priced capacity offered there was still insufficient low priced capacity to meet the anticipated demand and, consequently, prices were forecast to exceed \$5000/MWh.

Throughout the day participants shifted more capacity into low priced bands. By the 4 pm trading interval, around 90 per cent of capacity was priced below \$5000/MWh (a majority of this was priced below \$500/MWh see Figure 1). Even with all of this low priced capacity dispatched and utilising the Vic – NSW and Basslink interconnectors to their limits, high priced capacity was needed to meet customer demand and high prices eventuated. Relevant rebids are contained in Appendix B.

Appendix C details the generators involved in setting the price during the high-price periods, and how that price was determined by the market systems. The closing bids for all participants in Victoria and South Australia with capacity priced at or above \$5000/MWh for the high-price periods are set out in Appendix D.

3.2.1.2 Network Availability

Import and export limits control the maximum amount of electricity that can flow between regions. AEMO manages network outages using constraints to ensure that system security is maintained. Constraints are mathematical equations that determine the optimal output of generators based on their offers to manage or “limit” flows on specific transmission lines (including interconnectors) for each five minute interval.

Electricity is transferred between National Electricity Market (NEM) regions via high voltage interconnectors. The Vic-NSW interconnector connects Victoria to New South Wales. Under ideal conditions this interconnector can deliver up to 1300 MW of electricity from New South Wales into Victoria. However, dispatch conditions on the day meant that this interconnector was constrained to a lower level and cheaper electricity from the other eastern states could not be delivered into the combined Victoria and South Australia region. Basslink was exporting electricity from Tasmania into Victoria at its maximum available capacity during the high price period, as forecast.

Table 3 shows the actual and forecast import limit and flow from New South Wales into Victoria on the Vic-NSW interconnector.

Table 3: Actual and forecast flow and import limit of Vic-NSW interconnector

Trading interval	Flows (MW)			Import limit (MW)		
	Actual	4 hr forecast	12 hr forecast	Actual	4 hr forecast	12 hr forecast
3.30 PM	-321	-515	-304	-321	-515	-304
4.00 PM	-291	-408	-304	-291	-408	-304
4.30 PM	-305	-409	-228	-305	-409	-228
5.00 PM	-314	-249	-210	-314	-249	-210

Table 3 shows for the 3.30 to 5 pm trading intervals, flows from New South Wales into Victoria were at their limit (as forecast), which at 291 MW, was significantly lower than the nominal import limit of 1300 MW.

3.2.2 Demand

On 7 February maximum temperatures in Melbourne³ and Adelaide⁴ exceeded 37°C, leading to high forecast demand for electricity.

Across the afternoon, demand for electricity ranged from about 8700 MW to 9000 MW in Victoria and 2300 MW to 2700 MW in South Australia. With higher than forecast demand in both regions, AEMO declared an actual Lack of Reserve (LOR) 1 condition in Victoria from 3.30 pm and in South Australia from 5 pm. AEMO cancelled these at 7 pm and 8 pm respectively. Appendix A explains LOR.

While demand for electricity was high in both regions, it has been much higher in the past. To put this in context, record maximum demand in Victoria reached 10 490 MW in January 2009, and 3397 MW in South Australia in January 2011. However, it is worth noting the closure of two power stations in recent times: Alinta's 540 MW Northern Power Station in South Australia in May 2016, and Engie's 1600 MW Hazelwood Power Station in Victoria in March 2017. These closures have reduced the amount of coal generation available in the two regions, some of which would traditionally have been offered at low prices.

Australian Energy Regulator

April 2018

³http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=122&p_display_type=dailyDataFile&p_startYear=&p_c=&p_stn_num=086338

⁴http://www.bom.gov.au/jsp/ncc/cdio/weatherData/av?p_nccObsCode=122&p_display_type=dailyDataFile&p_startYear=&p_c=&p_stn_num=023090

Appendix A: Lack of Reserve

AEMO is required to monitor the level of reserve, or spare capacity, within each region of the NEM. Reserves are defined as the difference between the volume of electricity that can be made available to consumers, either by local generation or through the network from other regions of the NEM, and the regional customer demand at that time.

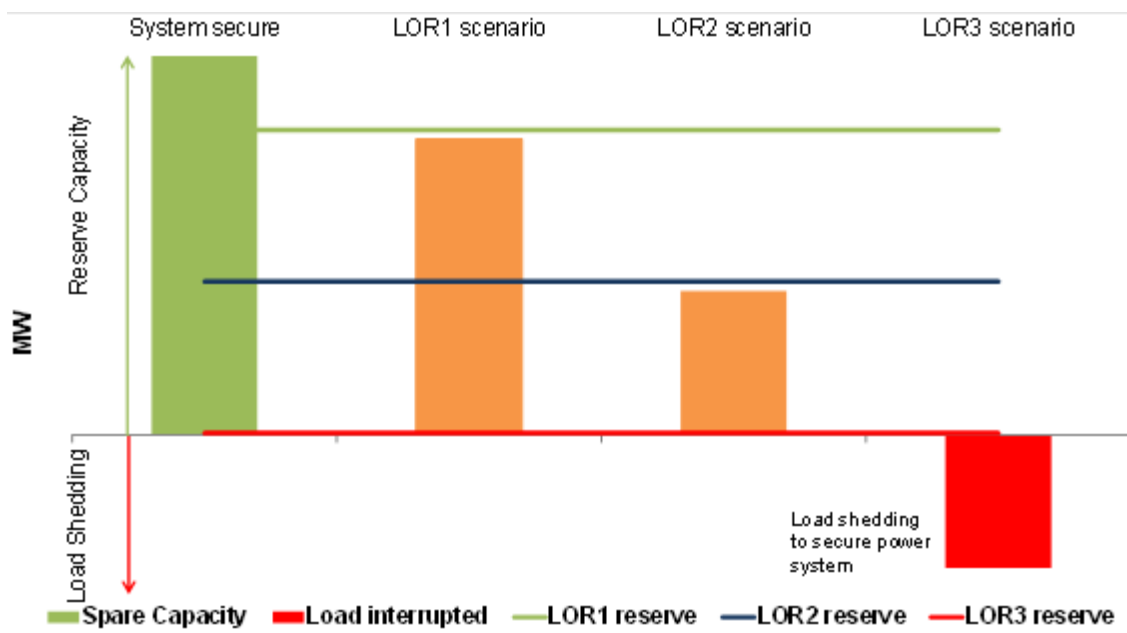
Reserves are an indicator of the supply demand balance and an important tool to communicate with the market potential and actual shortfalls. This is achieved through the release of LOR notices by AEMO. Forecast LOR notices are designed to elicit a market response from generators to increase their declared available capacity or retailers to reduce demand to address any forecast reserve shortfalls. Actual LOR notices are also issued when the thresholds are actually triggered.

There are three reserve thresholds which relate to managing power system security following a defined number of unplanned failures of either transmission or generating equipment (credible contingencies). An example of a credible contingency would be the failure of a large generator or the failure of a transmission line that would reduce interconnector capacity.

The three LOR levels are broadly categorised as follows:

- An LOR1 is declared when AEMO considers load shedding is likely to occur after two single credible contingencies.
- An LOR2 is declared when AEMO considers load shedding is likely to occur after a single credible contingency.
- An LOR3 is declared when customer(s) load would be, or is, shed in order to maintain the security of the power system.

Figure 5 shows the decrease in spare capacity and the lack of reserve thresholds



As the spare capacity drops below a reserve trigger level (represented as a horizontal line on the chart) either by a reduction in available spare capacity or an increase in demand, a new LOR reserve notice is issued to participants. If the region is left with insufficient reserve capacity to supply customer demand, an LOR3 is issued and load shedding occurs (as happened on 8 February 2017 in South Australia).

The solid green and amber blocks represent spare capacity. As the spare capacity drops below a reserve line (the horizontal lines) either by a reduction in available capacity or an increase in demand, a new reserve condition exists. AEMO monitors this situation continuously and issues LOR notices to inform participants.

When there is insufficient capacity to meet demand load must be shed (customers interrupted) and an LOR3 is issued.

Appendix B: Significant Rebids

The rebidding tables highlight the relevant rebids submitted by generators that impacted on market outcomes during the time of high prices. It details the time the rebid was submitted and used by the dispatch process, the capacity involved, the change in the price of the capacity was being offered and the rebid reason.

Table 4: Significant energy rebids for 4 pm in Victoria

Submit time	Time effective	Participant (region)	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
12.19 pm		Energy Australia	Yallourn	-45	-1000	N/A	1215~P~ADJ AVAIL DUE TO VACUUM LIMITS SL~
1.38 pm		AGL Energy	Mckay	180	14099	<279	1335~A~040 CHG IN AEMO DISP~45 PRICE INCREASE VS PD LYA \$13049.8 V \$919.79
1.53 pm		Snowy Hydro	Laverton North	163	-1000	14000	13:46:00 A VIC 5MIN PD PRICE \$264.77 LOWER THAN 5MIN PD 14:05@13:41 (\$76.16)
2.40 pm		Snowy Hydro	Laverton North	97	14000	-1000	14:36:00 A VIC 5MIN PD PRICE \$47.86 HIGHER THAN 5MIN PD 15:30@14:31 (\$388.91)
2.49 pm		Origin Energy	Mortlake	60	13050	-1000	1447A INC NEM DEM - 5PD 28195 MW > 30PD 27946 MW @ 1500 SL
3.08 pm		Origin Energy	Mortlake	80	13050	-1000	1506A INC NEM DEM - 5PD 28677 MW > 30PD 28513 MW @ 1530 SL
3.27 pm	3.35 pm	Ecogen Energy	Jeeralang A	20	11501	-1000	1520~A~BAND ADJ DUE TO CHANGE IN 5MIN PD PRICE \$9381 > \$1537 @ 1550 SL~

Submit time	Time effective	Participant (region)	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
3.27 pm	3.35 pm	Ecogen Energy	Jeeralang B	30	13086	-1000	1520~A~BAND ADJ DUE TO CHANGE IN 5MIN PD PRICE \$9381 > \$1537 @ 1550 SL~
3.27 pm	3.35 pm	Ecogen Energy	Newport	20	11053	-1000	1520~A~BAND ADJ DUE TO CHANGE IN 5MIN PD PRICE \$9381 > \$1537 @ 1550 SL~
3.38 pm	3.45 pm	EnergyAustralia	Yallourn	25	N/A	-1000	1535~P~ADJ AVAIL DUE TO AMBIENT CONDITIONS SL~

Table 5: Significant energy rebids for 4 pm in South Australia

Submit time	Time effective	Participant (region)	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
1.23 pm		Engie	Mintaro	71	14200	<390	1150~A~SA PRICE HIGHER THAN 30MPD: \$349.95 > \$159.66 HHE 13:30~
1.44 pm		Engie	Dry Creek	81	13100	<390	1340~A~RESPOND TO HIGH PRICES IN 30 MINUTE PD~
2.53 pm		Engie	Dry Creek	25	13100	<300	1450~A~RESPOND TO HIGH PRICES IN 5 MINUTE PD~
3.18 pm		Snowy Hydro	Pt Stanvac	20	592	10661	15:11:00 A SA 5MIN PD PRICE \$143.88 LOWER THAN 5MIN PD 15:35@15:06 (\$446.13)

Submit time	Time effective	Participant (region)	Station	Capacity rebid (MW)	Price from (\$/MWh)	Price to (\$/MWh)	Rebid reason
3.41 pm	3.50 pm	Snowy Hydro	Pt Stanvac	20	10661	-1004	15:26:00 A SA 5MIN PD PRICE \$8,828.82 HIGHER THAN 5MIN PD 15:35@15:21 (\$10,578.87)

Appendix C: Price setter

The following table identifies for the trading interval in which the spot price exceeded \$5000/MWh, each five minute dispatch interval price and the generating units involved in setting the energy price. This information is published by AEMO.⁵ The 30-minute spot price is the average of the six dispatch interval prices.

Table 6: Victoria - 4 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
15:35	\$380.95	AGL	MCKAY1	Energy	\$278.86	1.62	\$451.75
		CS Energy	GSTONE2	Energy	\$84.72	-0.28	-\$23.72
		CS Energy	GSTONE5	Energy	\$84.72	-0.28	-\$23.72
		CS Energy	GSTONE6	Energy	\$84.72	-0.28	-\$23.72
15:40	\$408.71	AGL	MCKAY1	Energy	\$278.86	1.62	\$451.75
		CS Energy	GSTONE2	Energy	\$84.72	-0.27	-\$22.87
		CS Energy	GSTONE5	Energy	\$84.72	-0.27	-\$22.87
		CS Energy	GSTONE6	Energy	\$84.72	-0.27	-\$22.87
		CS Energy	GSTONE2	Raise 60	\$14.74	1.62	\$23.88
		Delta Electricity	VP6	Raise 6	\$5.00	1.62	\$8.10
		AGL	MCKAY1	Raise 60	\$2.00	-1.62	-\$3.24
		AGL	MCKAY1	Raise 6	\$2.00	-1.62	-\$3.24
15:45	\$9044.87	EnergyAustralia	AGLHAL	Energy	\$10 578.87	0.85	\$8992.04
15:50	\$9138.73	EnergyAustralia	AGLHAL	Energy	\$10 578.87	0.86	\$9097.83
15:55	\$11 053.06	Ecogen Energy	NPS	Energy	\$11 053.06	1.00	\$11 053.06
16:00	\$11 053.06	Ecogen Energy	NPS	Energy	\$11 053.06	1.00	\$11 053.06
Spot Price		\$ 6847/MWh					

⁵ Details on how the price is determined can be found at www.aemo.com.au

Table 7: South Australia - 4 pm

DI	Dispatch Price (\$/MWh)	Participant	Unit	Service	Offer price (\$/MWh)	Marginal change	Contribution
15:35	\$434.00	AGL	MCKAY1	Energy	\$278.86	1.85	\$515.89
		CS Energy	GSTONE2	Energy	\$84.72	-0.32	-\$27.11
		CS Energy	GSTONE5	Energy	\$84.72	-0.32	-\$27.11
		CS Energy	GSTONE6	Energy	\$84.72	-0.32	-\$27.11
15:40	\$475.54	AGL	MCKAY1	Energy	\$278.86	1.89	\$527.05
		CS Energy	GSTONE2	Energy	\$84.72	-0.32	-\$27.11
		CS Energy	GSTONE5	Energy	\$84.72	-0.32	-\$27.11
		CS Energy	GSTONE6	Energy	\$84.72	-0.32	-\$27.11
		CS Energy	GSTONE2	Raise 60	\$14.74	1.89	\$27.86
		AGL	MCKAY1	Raise 60	\$2.00	-1.89	-\$3.78
		Delta Electricity	VP6	Raise 6	\$5.00	1.89	\$9.45
		AGL	MCKAY1	Raise 6	\$2.00	-1.89	-\$3.78
15:45	\$10 578.87	EnergyAustralia	AGLHAL	Energy	\$10 578.87	1.00	\$10 578.87
15:50	\$10 578.87	EnergyAustralia	AGLHAL	Energy	\$10 578.87	1.00	\$10 578.87
15:55	\$12 936.10	Ecogen Energy	NPS	Energy	\$11 053.06	1.17	\$12 932.08
16:00	\$13 004.14	Ecogen Energy	NPS	Energy	\$11 053.06	1.18	\$13 042.61

Spot Price \$ 8001/MWh

Appendix D: Closing bids

Figures D1 to D7 highlight the half hour closing bids for participants in Victoria and South Australia with capacity priced at or above \$5000/MWh during the periods in which the spot price exceeded \$5000/MWh. They also show generation output and the spot price.

Victoria

Figure D1 - AGL (Loy Yang A, Macarthur, Oaklands Hill, Somerton, Dartmouth, Eildon, McKay and West Kiewa) closing bids, dispatch and spot price

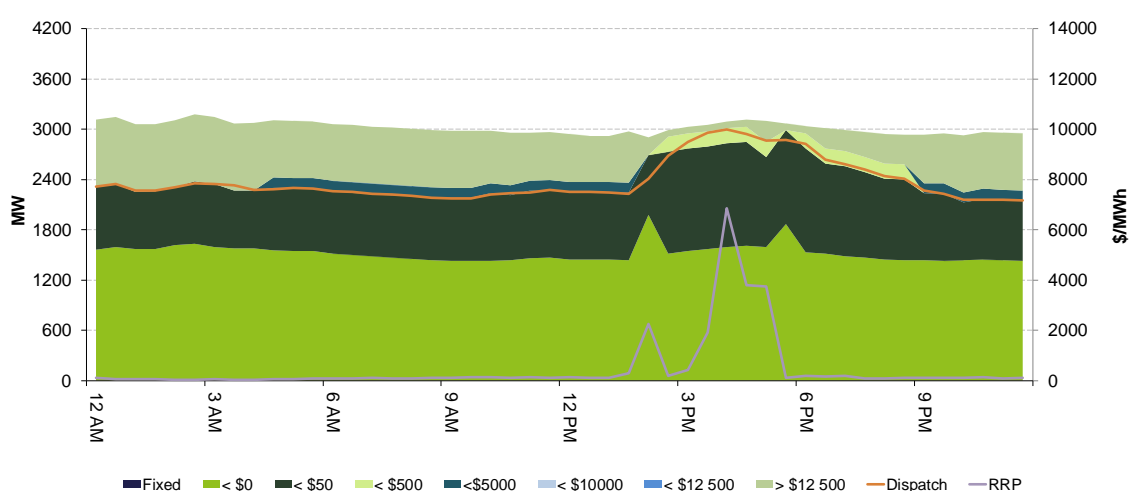


Figure D2 – Ecogen (Jeeralang A, Jeeralang B and Newport) closing bids, dispatch and spot price

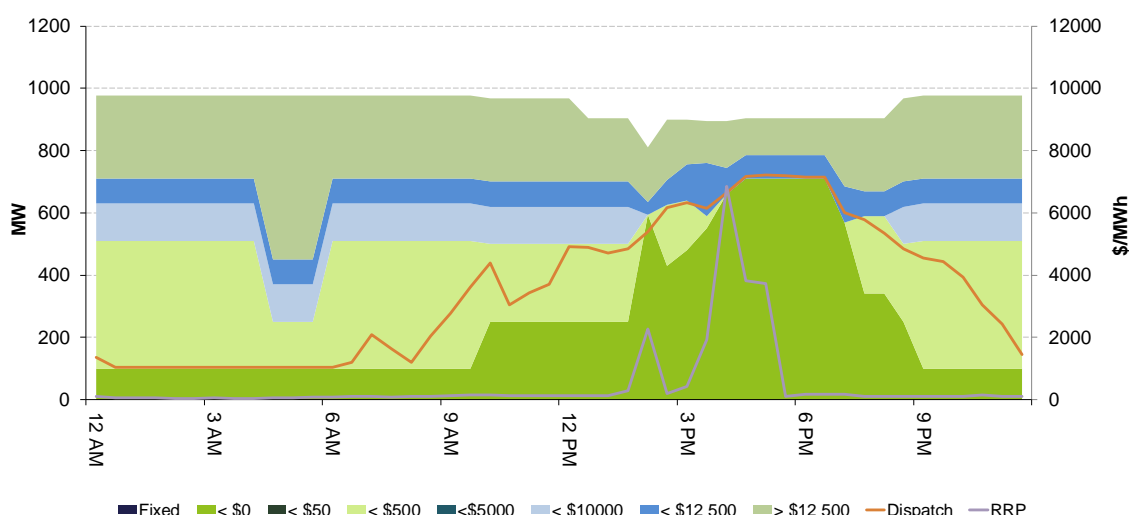
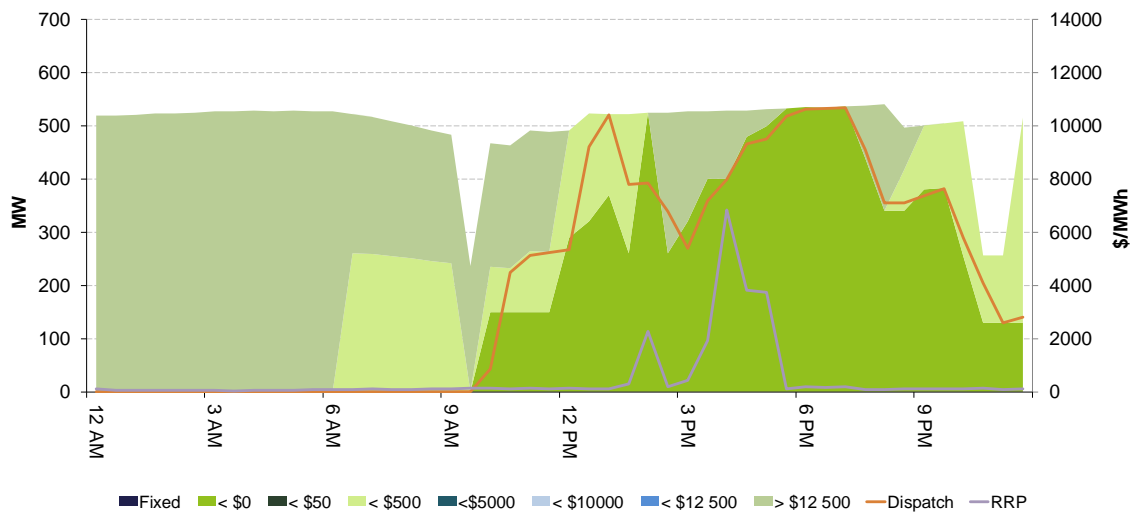


Figure D3 – Origin (Mortlake) closing bids, dispatch and spot price



South Australia

Figure D4 - AGL (Torrens Island, The Bluff, Hallett and North Brown Hill,) closing bids, dispatch and spot price

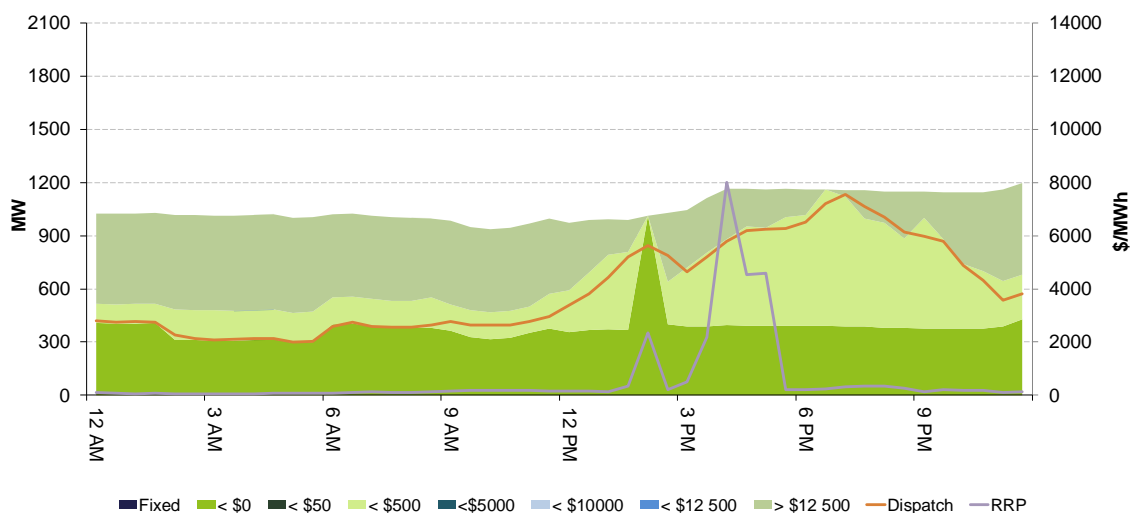


Figure D5 Engie (Pelican Point, Dry Creek, Mintaro, Port Lincoln and Snuggery) closing bids, dispatch and spot price

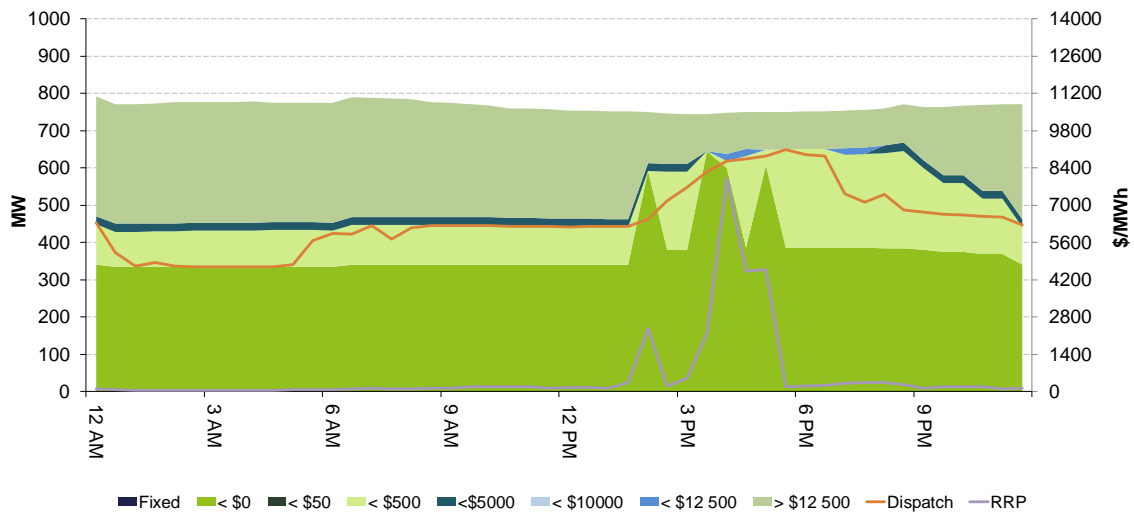


Figure D6 – EnergyAustralia (Hallett and Waterloo) closing bids, dispatch and spot price

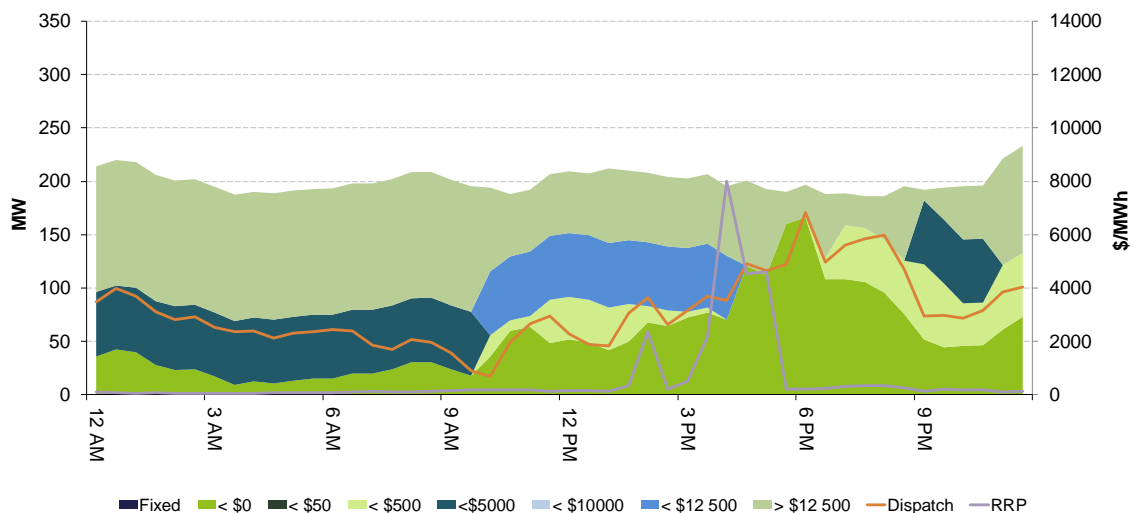
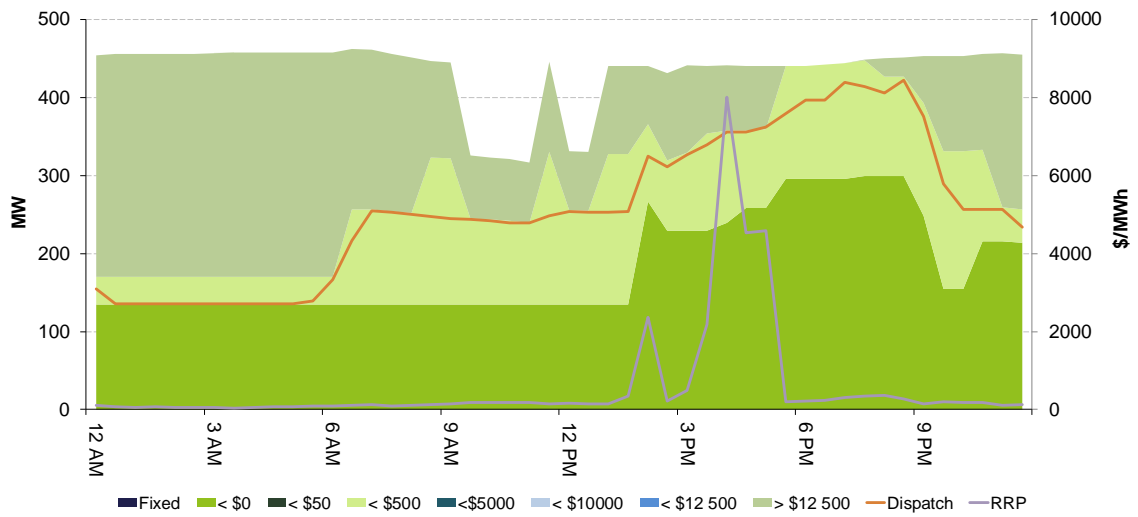


Figure D7 – Origin (Ladbroke Grove, Quarantine, Osborne)



Appendix E: Relevant Market Notices

Market Notice	Type	Date of issue	Last Changed
61126	Reserve notice	06/02/2018 11:24:25	06/02/2018 11:24:25
External Reference			
STPASA - Forecast Lack Of Reserve Level 1 (LOR1) in the Victoria Region on 07/02/2018			
Reason			
AEMO ELECTRICITY MARKET NOTICE			
AEMO declares a Forecast LOR1 condition under clause 4.8.4(b) of the National Electricity Rules for the VIC region for the following period:			
From 1630 hrs to 1730 hrs on 07/02/2018.			
The contingency capacity reserve required is 1120 MW.			
The minimum reserve available is 932 MW.			
Bhishma Chhetri			
AEMO Operations			

Market Notice	Type	Date of issue	Last Changed
61128	Reserve notice	06/02/2018 12:59:05	06/02/2018 12:59:05
External Reference			
PDPASA - Forecast Lack Of Reserve Level 1 (LOR1) in the Vic Region on 07/02/2018			
Reason			
AEMO ELECTRICITY MARKET NOTICE			
AEMO declares a Forecast LOR1 condition under clause 4.8.4(b) of the National Electricity Rules for the Vic region for the following periods:			
From 1630 hrs to 1730 hrs on 07/02/2018.			
The contingency capacity reserve required is 1120 MW.			
The minimum reserve available is 931 MW.			
Manager NEM Real Time Operations			

Market Notice	Type	Date of issue	Last Changed
61130	Reserve notice	07/02/2018 07:36:57	07/02/2018 07:36:57

External Reference

PDPASA - Update of the Forecast Lack Of Reserve Level 1 (LOR1) in the VIC Region on Wednesday, 7 February 2018

Reason

AEMO ELECTRICITY MARKET NOTICE

The Forecast LOR1 condition in the VIC region advised in AEMO Electricity Market Notice No. 61128 has been updated at 0730 hrs 7/02/2018 to the following:

From 1630 hrs 7/02/2018 to 1800 hrs on 7/02/2018.

The contingency capacity reserve required is 1120 MW.

The minimum reserve available is 862 MW.

Manager NEM Real Time Operations

Market Notice	Type	Date of issue	Last Changed
61146	Reserve notice	07/02/2018 15:54:59	07/02/2018 15:54:59

External Reference

Actual Lack Of Reserve Level 1 (LOR1) in the VIC Region- 7/02/2018

Reason

AEMO ELECTRICITY MARKET NOTICE

Actual Lack Of Reserve Level 1 (LOR1) in the VIC Region- 7/02/2018

An Actual LOR1 condition has been declared for the VIC Region from 1530 hrs.

The Actual LOR1 condition is forecast to exist until 1800 hrs

The contingency capacity reserve required is 1120 MW

The minimum reserve available is 1104 MW

Manager NEM Real Time Operations

Market Notice	Type	Date of issue	Last Changed
61147	Reserve notice	07/02/2018 17:16:42	07/02/2018 17:16:42

External Reference

Actual Lack Of Reserve Level 1 (LOR1) in the SA Region.- 7/02/2018

Reason

AEMO ELECTRICITY MARKET NOTICE

Actual Lack Of Reserve Level 1 (LOR1) in the SA Region.- 7/02/2018

An Actual LOR1 condition has been declared for the SA Region from 1700 hrs.

The Actual LOR1 condition is forecast to exist until 1730 hrs

The contingency capacity reserve required is 600 MW

The minimum reserve available is 580 MW

Manager NEM Real Time Operations

Market Notice	Type	Date of issue	Last Changed
61149	Reserve notice	07/02/2018 19:04:33	07/02/2018 19:04:33

External Reference

Cancellation of Actual (LOR1) condition in the Vic region - 07/02/2018

Reason

AEMO ELECTRICITY MARKET NOTICE

Cancellation of Actual (LOR1) condition in the Vic region - 07/02/2018

The Actual LOR1 Condition in the Vic Region advised in AEMO Electricity Market Notice No.61146 is cancelled at 1900 hrs 07/02/2018.

Manager NEM Real Time Operations

Market Notice	Type	Date of issue	Last Changed
61151	Reserve notice	07/02/2018 20:03:53	07/02/2018 20:03:53
External Reference			
Cancellation of Actual (LOR1) condition in the SA region - 07/02/2018			
Reason			
AEMO ELECTRICITY MARKET NOTICE			
Cancellation of Actual (LOR1) condition in the SA region - 07/02/2018			
The Actual LOR1 Condition in the SA Region advised in AEMO Electricity Market Notice No.61147 is cancelled at 2000 hrs 07/02/2018.			
Manager NEM Real Time Operations			